

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A method of preparing an absorbent article, the method comprising:

providing an absorbent web comprising cellulosic fibers and binder material selected from at least one of a solid, an emulsion, a slurry, a dispersion, and a liquid;

applying radiofrequency energy to the binder material to activate the binder material;

reducing application of radiofrequency energy to the binder material;

deforming the absorbent web including the activated binder material against a molding surface ~~before the binder material becomes solidified~~ to impart a three-dimensional shape to the absorbent web;

disposing the absorbent web above a backsheet;

disposing a topsheet above the absorbent web; and

attaching the topsheet to the backsheet.

2. (Original) The method of Claim 1, wherein the binder material comprises one of a thermosetting material, a thermoplastic material, and combinations thereof.

3. (Original) The method of Claim 2, wherein the binder material comprises a bicomponent fiber.

4. (Original) The method of Claim 1, wherein the binder material comprises a latex.

5. (Original) The method of Claim 4, wherein the binder material either is non-crosslinking or comprises a crosslinking inhibitor.

6. (Original) The method of Claim 1, wherein the radiofrequency energy is microwave energy applied within a tunable microwave resonance chamber.

7. (Original) The method of Claim 6, wherein the microwave energy is provided in the resonance chamber in a TM_{010} or TM_{020} mode.

8. (Original) The method of Claim 1, wherein the binder material includes a water-soluble, non-colloidal, cationic thermosetting material.

9. (Currently Amended) The method of Claim 1, further comprising adding moisture to the absorbent web prior to application of the radiofrequency energy.

10. (Currently Amended) The method of Claim 1, wherein the maximum temperature of the absorbent web does not exceed 140°C during activation of the binder.

11. (Currently Amended) A method of making a molded absorbent web in an automated machine, the method comprising:

providing an absorbent web including cellulosic fibers and a binder material;

conveying the absorbent web into an automated molding device including a molding substrate;
heating the binder material in the absorbent web by applying radiofrequency energy;
deforming the absorbent web against the molding substrate to impose a shape to the absorbent web;
cooling the binder material; and
removing the absorbent web from the molding substrate;
wherein the shape imposed by the molding substrate is maintained by the binder material.

12. (Original) The method of Claim 11, wherein the radiofrequency energy comprises microwaves and the binder material is microwave-sensitive.

13. (Currently Amended) The method of Claim 12, wherein heating the binder material comprises passing the absorbent web through a microwave resonance chamber.

14. (Original) The method of Claim 11, wherein the absorbent web additionally includes a microwave-sensitive component.

15. (Original) The method of Claim 14, wherein the microwave-sensitive component is selected from a group consisting of water, an ionic aqueous solution, microwave-sensitive polymers, and combinations thereof.

16. (Original) The method of Claim 11, wherein the binder material includes a dielectric loss constant substantially greater than that of cellulose.

17. (Original) The method of Claim 11, wherein the binder material comprises a bicomponent fiber including a microwave-sensitive core component.

18. (Original) The method of Claim 11, wherein the binder material comprises one of a thermosetting material, a thermoplastic material, and combinations thereof.

19. (Original) The method of Claim 12, wherein heating the binder material and deforming the absorbent web occur simultaneously.

20. (Original) The method of Claim 19, wherein the molding substrate comprises a microwave-transparent solid material.

21. (Original) The method of Claim 11, wherein heating the binder material occurs prior to deforming the absorbent web.

22 (Original) The method of Claim 11, wherein the shape of the absorbent web imposed by the molding substrate comprises a central hump.

23. (Original) The method of Claim 11, additionally comprising deforming the absorbent web against the molding substrate to impose to the absorbent web a three-dimensional shape having an overall surface depth of at least 2 mm.

24. (Original) The method of Claim 11, additionally comprising cutting the absorbent web before or after deforming the absorbent web to form more than one discrete absorbent web section.